Sector 7

MHATT-CAT

Center for Real-Time X-ray Studies

Overview

The Center for Real-Time X-ray Studies CAT (MHATT-CAT) was formed in 1989 as a university-industry partnership between the University of Michigan, Howard University, and Bell Laboratories (Lucent Technologies). MHATT-CAT's facilities include two fully instrumented beamlines (one based on an undulator and the other on a bend magnet) to exploit the unique characteristics of the APS. A high-speed communications network between the participating institutions and the APS is planned to facilitate the involvement of students in the MHATT-CAT collaboration and to maximize participation in research at national user facilities.

Research Focus

MHATT-CAT's research program is focused on time-dependent structural phenomena across a broad range of materials systems, including thin films, polymers, liquid crystals, and biomaterials. The undulator line serves as the host for microprobe studies of high-temperature superconductors, interconnects, and optical fibers; for the development of coherent x-ray scattering techniques; and for the application of ultrafast lasers. The sector is expected to develop into an international gathering point for scientists and engineers with strong interest in time-resolved structural studies.

CAT contact:	Roy Clarke, *CAT Director*	tel 734.764.4466	royc@umich.edu
	WWW Site		http://www.mhatt.aps.anl.gov
Beamline contacts:	Eric Dufresne, *(7-ID)*	tel 630.252.0274	dufresne@umich.edu
	Roy Clarke, *(7-ID)*	tel 734.764.4466	royc@umich.edu